

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: Boussiotis, V, *et al.*

Serial No.: Not Yet Assigned

Filed: herewith

For: Methods for Modulating T Cell
Unresponsiveness

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Examiner:

Commissioner for Patents
Washington, D.C. 20231

CERTIFICATION UNDER 37 CFR 1.10

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I hereby certify that this 37 CFR 1.53(d) request and the documents referred to therein as enclosed are being deposited with the United States Postal Service on the date indicated above in an envelope as "Express Mail Post Office to Addressee" service under 37 CFR 1.10 and addressed to the Commissioner for Patents, Box Patent Application, P.O. Box 2327, Arlington, VA 22202.

William J. McKinney

Name of Person Mailing Paper


Signature of Person Mailing Paper

PRELIMINARY AMENDMENT

Dear Sir:

Prior to examination, please amend this application as follows:

In the Claims:

Please cancel claim 1.

Please add new claims 92-107 as follows:

92. (NEW) A method for stimulating a T cell response to a tumor cell in a subject with a tumor, comprising modifying the tumor cell to express a CD2 ligand and a CD28 or CTLA4 ligand such that stimulation of a T cell response to a tumor cell occurs.

93. (NEW) A method of claim 92, wherein the tumor cell is modified to express a CD2 ligand and a CD28 or CTLA4 ligand by introducing into the tumor cell at least one nucleic acid encoding the CD2 ligand and the CD28 or CTLA4 ligand in a form suitable for expression of the CD2 ligand and the CD28 or CTLA4 ligand on the tumor cell surface.

94. (NEW) A method of claim 93, wherein the tumor cell is obtained from the subject and modified *ex vivo* to form a modified tumor cell and the method further comprises administering the modified tumor cell to the subject.

95. (NEW) A method of claim 93, wherein a first sample of tumor cells is modified to express a CD2 ligand to form a first sample of modified tumor cells and a second sample of tumor cells is modified to express a CD28 or CTLA4 ligand to form a second sample of modified tumor cells

96. (NEW) A method of claim 95, wherein the first and second samples of modified tumor cells are administered to the subject simultaneously.

97. (NEW) A method of claim 93, wherein the first and second samples of modified tumor cells are administered to the subject sequentially.

98. (NEW) A method of claim 92, further comprising contacting T cells of the subject with an agent that stimulates exposure of a T11.3 neo-epitope on a CD2 surface receptor on the T cell.

99. (NEW) A method of claim 98, wherein the agent is IL-2 or IL-4.

100. (NEW) A method of claim 99, wherein T cells are obtained from the subject and contacted with IL-2 or IL-4 *ex vivo* and the method further comprises readministering the T cells to the subject.

101. (NEW) The method of claim 92, wherein said CD2 ligand is LFA-3.

102. (NEW) The method of claim 92, wherein said CD28 or CTLA4 ligand is B7-1.

103. (NEW) The method of claim 92, wherein said CD28 or CTLA4 ligand is B7-2.

104. (NEW) The method of any one of claims 92-100, wherein said CD28 or CTLA4 ligand is B7-1 and B7-2.

105. (NEW) The method of claim 101, wherein said CD28 or CTLA4 ligand is B7-1.

106. (NEW) The method of claim 101, wherein said CD28 or CTLA4 ligand is B7-2.

107. (NEW) The method of claim 101, wherein said CD28 or CTLA4 ligand is B7-1 and B7-2.

REMARKS

Claim 1 has been canceled. The cancellation of this claims should in no way be construed as an acquiescence by Applicants to any of the rejections of record involving this claim.

Claims 92-107 have been newly added. Support for the new claims can be found throughout the specification including the claims as originally filed.

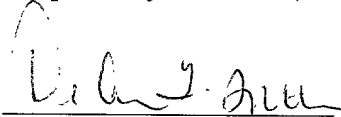
No new matter has been added.

Any amendments to and/or cancellation of the claims should in no way be construed as an acquiescence to any of the Examiner's rejections and was done solely to expedite prosecution. Applicants reserve the right to pursue the claims as originally filed in this or a separate application(s).

CONCLUSION

It is respectfully submitted that this application is in condition for allowance. If a telephone conversation with Applicants' attorney would help expedite the prosecution of the above-identified application, the Examiner is urged to call Applicants' attorney at (617) 227-7400.

Respectfully submitted,



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